In the Claims (the claims are unamended as follows)

1. (original) A method of simulating operation of a production system comprising a first set of at least one tool controlled by a second set of at least one tool, the method comprising:

receiving a quantity of time during which the second set of at least one tool is not able to control the first set of at least one tool; and

calculating at least one production quantity affected by the first set of at least one tool responsive to the quantity of time received..

- 2. (original) The method of claim 1 wherein the quantity of time received is a quantity of time at least one of the tools in the second set is not operational.
- 3. (original) The method of claim 1 wherein at least one of the tools in the first set comprises a production processing tool.
- 4. (original) The method of claim 1 wherein the quantity of time comprises a percentage.
- 5. (original) The method of claim 1 wherein the production quantity comprises a throughput.
- 6. (original) The method of claim 1 wherein the production quantity comprises a good unit equivalents produced per unit of time.

7. (original) The method of claim 1 wherein:

the production process comprises a plurality of sets of at least one tool, comprising the first set and the second set and a third set; and

the production quantity is additionally calculated responsive to a quantity related to the third set of at least one tool.

- 8. (original) The method of claim 7 wherein the production quantity comprises at least one selected from:
- a number of products provided to at least one of the plurality of sets of at least one tool; and
- a number of products provided by at least one of the plurality of sets of at least one tool.
- 9. (original) The method of claim 7 wherein the production quantity comprises:
- a number of products provided to at least one of the plurality of sets of at least one tool; and
- a number of products provided by at least one of the plurality of sets of at least one tool.
- 10. (original) The method of claim 7 wherein the production quantity comprises an amount of time at least one of the plurality of sets of at least one tool takes to process a unit produced by said at least one tool.

- 11. (original) The method of claim 7 wherein the production quantity comprises an average amount of time at least one tool in at least one of the plurality of sets takes to process a unit produced by said at least one tool in the set.
- 12. (original) The method of claim 7 wherein the production quantity comprises a number of tools in at least one of the plurality of sets of at least one tool responsive to at least one capacity.
- 13. (original) The method of claim 7 wherein the production quantity comprises a percent of utilization of the at least one tool in at least one of the plurality of sets.
- 14. (original) The method of claim 7 wherein the production quantity comprises a number of sets performing a same step in the production system in the plurality of sets.
- 15. (original) The method of claim 14 wherein each of the number of sets comprises a same number of tools.
- 16. (original) A computer program product comprising a computer useable medium having computer readable program code embodied therein for simulating operation of a production system comprising a first set of at least one tool controlled by a second set of at least one tool, the

computer program product comprising computer readable program code devices configured to cause a computer to:

receive a quantity of time during which the second set of at least one tool is not able to control the first set of at least one tool; and

calculate at least one production quantity affected by the first set of at least one tool responsive to the quantity of time received.

- 17. (original) The computer program product of claim
 16 wherein the quantity of time received is a quantity of
 time at least one of the tools in the second set is not
 operational.
- 18. (original) The computer program product of claim
 16 wherein at least one of the tools in the first set
 comprises a production processing tool.
- 19. (original) The computer program product of claim
 16 wherein the quantity of time comprises a percentage.
- 20. (original) The computer program product of claim
 16 wherein the production quantity comprises a throughput.
- 21. (original) The computer program product of claim
 16 wherein the production quantity comprises a good unit
 equivalents produced per unit of time.
- 22. (original) The computer program product of claim 16 wherein:

the production process comprises a plurality of sets of at least one tool, comprising the first set and the second set and a third set; and

the production quantity is additionally calculated responsive to a quantity related to the third set of at least one tool.

23. (original) The computer program product of claim 22 wherein the production quantity comprises at least one selected from:

a number of products provided to at least one of the plurality of sets of at least one tool; and

a number of products provided by at least one of the plurality of sets of at least one tool.

24. (original) The computer program product of claim
22 wherein the production quantity comprises:

a number of products provided to at least one of the plurality of sets of at least one tool; and

a number of products provided by at least one of the plurality of sets of at least one tool.

25. (original) The computer program product of claim 22 wherein the production quantity comprises an amount of time at least one of the plurality of sets of at least one tool takes to process a unit produced by said at least one tool.

- 26. (original) The computer program product of claim
 22 wherein the production quantity comprises an average
 amount of time at least one tool in at least one of the
 plurality of sets takes to process a unit produced by said
 at least one tool in the set.
- 27. (original) The computer program product of claim
 22 wherein the production quantity comprises a number of
 tools in at least one of the plurality of sets of at least
 one tool responsive to at least one capacity.
- 28. (original) The computer program product of claim
 22 wherein the production quantity comprises a percent of
 utilization of the at least one tool in at least one of the
 plurality of sets.
- 29. (original) The computer program product of claim
 22 wherein the production quantity comprises a number of
 sets performing a same step in the production system in the
 plurality of sets.